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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/319,202	06/02/1999	OSAMU SHIRASAKI	20-4576P	2596

2292 7590 12/31/2002

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EXAMINER

GALLAGHER, JOHN J

ART UNIT	PAPER NUMBER
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1733

14

DATE MAILED: 12/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-14

Office Action Summary

Application No.

09/3.9202

Applicant(s)

Examiner

Group Art Unit

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-4 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-4 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) (2) 9513
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

Part of Paper No. _____

1. Applicants' (Preliminary) amendment, filed 30 January 2002 has been received and made of record.

2. The disclosure is objected to because of the following informalities: Page 8 line 28 - change "PRFE" to "PTFE".

Appropriate correction is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. § 102(b) as being (clearly) anticipated by the Japanese Nitto reference (already of record).

The Nitto reference discloses that it is known to melt/fusion bond two fluoropolymer (e.g. PFA, FEP, EPE COPOLYMERS etc. and compare with applicants' specification at page 4 line 21 thru page 5 line 10) parts/substrates together via a process wherein a heat SHRINKABLE outer tubular part is placed over/around a second (apparently NON or LESS SHRINKABLE i.e. DIFFERENT shrinkages) inner tubular part, bonding being effected by a combination of the heat shrinking force applied by the outer part and the hot melt characteristics of both parts. (English

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Translation Abstract and, in the translation provided: Fig. 1, page 3 last two lines, page 4 lines 3-4, 8-9, 13-17, 22-25 (especially) and 31-32, page 5 lines 10-13, 20-23, 28-29 and 32-33, page 6 lines 1-2, 8-10 and 27-31). Further along this line (and with respect to applicants' contentions made at page 3 line 15 thru page 4 line 9 of the aforementioned amendment), apart from the fact that the methodology or technique employed to produce applicants' molded parts is not recited in the claims, page 6 lines 20-25 of applicants' specification fairly indicates and establishes that (a) this production method is conventional (and therefore known, available and obvious for those of ordinary skill in this art to use); and (b) the only criterion ~~being~~³ that the molded parts are sufficiently cohesive to be integral (which the parts employed in the Nitto reference are seen to indeed be).

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 are further rejected under 35 U.S.C. § 103(a) as being unpatentable over the Japanese IND KK reference

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in view of any one of Vogdes et al. or Davis et al. (all three foregoing references also being already of record) or the Nitto reference.

The IND KK reference discloses that it is known to bond two resinous parts/components/substrates having DIFFERENT (i.e. larger and smaller) heat SHRINKAGE property together utilizing the difference in heat shrinkage characteristics to effect lamination, one part being positioned within/surrounded by the other. (English Translation Abstract and, in the translation provided: Page 1 last 6 lines (i.e. the claim), page 2 lines 3-5, page 3 lines 12-15).

Vogdes et al. (Abstract, column 1 lines 19-21 and 33, N.B. column 2 lines 54-58, column 3 lines 5-16 and 34-36) and Davis et al. (Abstract, column 1 lines 5-8, column 5 lines 51-68 (and N.B. line 62)) both disclose that fluorinated (e.g. PTFE) COPOLYMERS (i.e. MODIFIED polymers) are known and appreciated by this art to be heat shrinkable, such that it would have been obvious to one of ordinary skill in this art to employ the fluorinated resin of any of the THREE secondary references in the process of the IND KK reference in place of the corresponding, analogous resin materials employed therein (IF the fluorinated resins are not already encompassed within the teaching of the IND KK reference); mere substitution of one known heat shrinkable resin for another involved. Further along this line (and with

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respect to applicants' contentions made at page 4 line 10 thru page 6 line 14 of the aforementioned amendment) (a) it is noted that the modification envisioned for use by applicants is nowhere recited in the claims (although this modification IS disclosed in applicants' specification (N.B. page 4 lines 21-23) as involving COPOLYMERIZATION of PTFE with CERTAIN comonomers); and (b) the foregoing notwithstanding, again N.B. page 4 lines 22-25 of the Nitto reference translation.

7. Claims 1-4 are still further rejected under 35 U.S.C. § 103(a) as being unpatentable over the Nitto reference in view of each of Vogdes et al. or Davis et al., the reasoning being essentially the same as (i.e. analogous to) that set forth at the end of paragraph 6, above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. J. Gallagher whose telephone number is (703) 308-1971. The examiner can normally be reached on M-F from approximately 8:30 A.M. to 5 P.M. The examiner can also be reached on alternate N/A.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball, can be reached on (703) 308-2058. The fax phone number for this Group is (703) ~~305-3599~~ ⁸⁷²⁻⁹³¹⁰

Serial No. 09/319,202

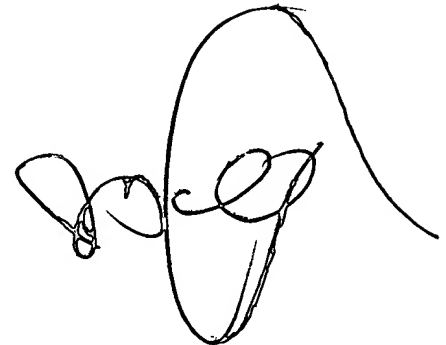
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661/0662.

JJG
JJGallagher:cdc

December 17, 2002

A large, stylized handwritten signature in black ink, likely belonging to John J. Gallagher, positioned above a typed nameplate.

JOHN J. GALLAGHER
PRIMARY EXAMINER
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